

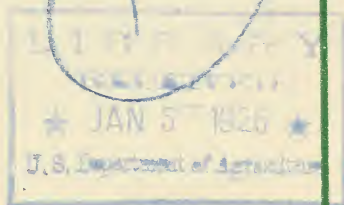
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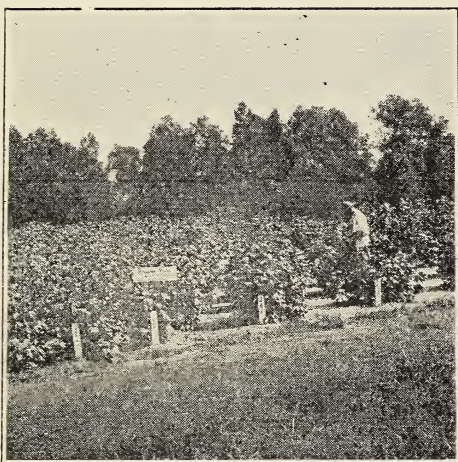
1923?

Delfos Cotton and What It Is



Stoneville Pedigreed
Seed Company
Stoneville, Mississippi

Delfos Cotton and What It Is



Plant breeder at work.

Stoneville Pedigreed
Seed Company
Stoneville, Mississippi

DELLOS COTTON

WHAT IT IS

Dellos cotton is a new variety originated at the Mississippi Delta Experiment Station by Dr. H. B. Brown, formerly plant breeder for the Mississippi Experiment Station. A great deal of interest is being taken in this new cotton, especially by cotton growers on alluvial lands and in long staple upland districts.

THE NAME

The name "Dellos" was taken from the words "Delta Foster." This name was used because the variety was bred from Foster cotton and the work was done in the "Delta." This cotton is not related to Delta-type Webber in any way. Some have thought it to be a cross with Webber on account of the name. Dellos is a selection from Foster-120.

HISTORY

The pedigree of Dellos cotton runs back to 1904, the date Prof. Saunders of the United States Department of Agriculture made a cross between Sunflower and Triumph cotton. Foster cotton, a variety put out by the United States Department of Agriculture, came from this cross. Selections made from a field of Foster at the Delta Experiment Station by E. C. Ewing in 1911 resulted in the production of Foster-120, a strain grown rather extensively in the Delta for a few years.

In 1916, H. B. Brown, at that time with the Mississippi Experiment Station but now head plant breeder for Stoneville Pedigreed Seed Company, made a large number of selections from a field of Foster-120. These selections were tested in various tests for three years. Two of them were found to possess much merit and were increased and distributed to growers. They were, at first, designated as Foster 6102 and Foster-631 but later, or in 1921, the name Dellos was given to them to avoid confusion with the old Department of Agriculture Foster and Foster-120 from which they differed by certain well marked characteristics. In the mind of many planters Foster cotton was all Foster cotton and no attention was paid to strain numbers.

DELLOS-6102

DESCRIPTION OF VARIETY

Dellos-6102 has low, spreading, open plants, with comparatively slender main stem and branches; (See Fig. 1) the fruit branches are long and numerous; one to four vegetative branches are found on the plant if wide spaced; leaves are small; bolls are narrowly ovate, short pointed, 4 and 5 locked, open well, pick well, and run 70 to 80 to the pound of seed cotton; lint percentage 31 to 32; lint length $1\frac{1}{8}$ to $1\frac{3}{16}$. Dellos-6102 is very early and very prolific. Bloom counts made by the Mississippi Experiment Station for a period of four years showed a higher rate of blooming for this than for any other variety (See Miss. Exp. Sta. Bulls. 187 and 205 and other publications).

The blooming record for a 125 foot row of each of the prominent varieties in the Seed Farm Variety Test in 1923 ran as follows:

Salsbury	804 blooms
Express-432	678 blooms
Watson's Staple	565 blooms
Express-350	898 blooms
Lightning Express-1.....	953 blooms
Lightning Express-2.....	835 blooms
Burdette Express.....	905 blooms
Walcott's Express.....	734 blooms
Foster-120	688 blooms
Delfos-6102	1054 blooms
Delfos-631	1058 blooms
Webber-249-33	752 blooms
Webber-49-6	750 blooms
Deltatype Webber	547 blooms
Hartsville-16	459 blooms

The plants begin blooming about the first of July. Counts were made on nineteen different days in July. Boll weevils were plentiful during most of the month.

BOLL WEEVIL RESISTANCE

Delfos-6102 is the best cotton in existence for planting in regions heavily infested with boll weevils. The weevils in a field of cotton will destroy what squares they need, regardless of the variety. If squares are plentiful, a much higher percentage will escape than if there is only a limited number. Consequently a cotton that puts on a large number of forms has the advantage in weevil resistance over one that produces a smaller number.

DEFECTS

No one variety of cotton is especially adapted to all conditions. Delfos-6102 is not wilt resistant and consequently should not be planted on soil that is badly infected with wilt or blight. It will make a good yield on soils lightly infected. There are but few fields in the Delta that are badly infected.

Delfos-6102 is not a vigorous growing variety and so is not suited for planting on thin lands unless the soil is well fertilized. But does it pay anyone to farm poor land without fertilizing?

SPECIAL ADAPTATIONS

Delfos-6102 is especially well adapted to planting on new ground or on lands that are so fertile that other varieties of cotton when grown on them become too rank. It does well on medium fertile land and is the best variety for late planting, or for growing under heavy boll weevil infestation.

PERFORMANCE RECORD OF DELFO-6102

The record made by Delfos-6102 in the various variety tests conducted by the experiment stations of the State and in other states, has been phenomenal. Table 1 shows the record in brief.

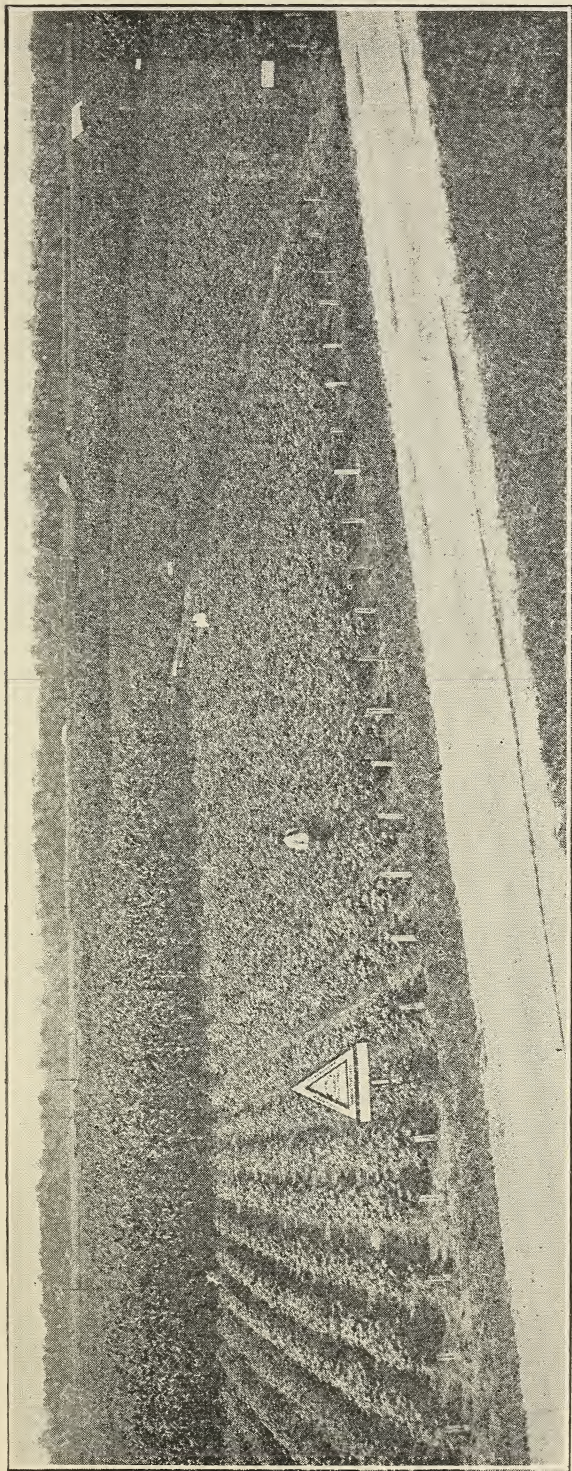


Fig. 2. Trial Grounds and Breeding Plats.

TABLE NO. 1—DELFOF-6102 IN EXPERIMENT STATION TESTS

Where Tested	Wt. Seed Cotton Per Acre	Length Staple	Lint %	Money Value Per Acre	Rank in Money Value	Bolls to a Pound
Var. test Miss. Col. Exp. Sta., '19.....	1124	1-1/8	30.8	202.44	4	69
Var. test Delta Exp. Sta., '19.....	1479	1-1/8	30.7	265.32	8	....
Var. test Miss. Col. Exp. Sta., '20.....	1085	1-3/16	30.7	85.99	2	80
Var. test Delta Exp. Sta., '20.....	1855	1-1/8	32.3	134.75	2	....
Var. test South Miss. Exp. Sta., '20.....	1060	1-3/16	31.1	84.96	4	....
Var. test Col. Exp. Sta., '21.....	1315	1-3/16	32.4	138.95	3	....
Var. test Delta Exp. Sta., '21.....	1608	1-3/16	31.3	194.13	1	76
Var. test Raymond Exp. Sta., '21.....	1039	1-1/8	33.4	104.06	2	....
Var. test Miss. Col. Exp. Sta., '22.....	847	1-3/16	31.0	82.51	11	....
Var. test South Miss. Exp. Sta., '22.....	918	1-3/16	30.0	93.31	6	....
Var. test Delta Exp. Sta., '22.....	1082	1-3/16	31.5	108.54	1	....
Var. test Seed Farm, Stoneville, '22.....	1720	1-1/8f	32.7	169.19	2	81
Var. test Raymond Exp. Sta., '22.....	1440	1-3/16	31.6	139.76	1	....
Var. test Burdette, Ark., '22.....	2040	.....	.....	.....	2	....
Var. test Manchester, N. C., '22.....	.....	.....	.....	.....	1	....

Each of the above tests included twenty or more of the best cotton varieties known. In twenty-three different variety tests conducted in Mississippi in 1922, Delfos ranked first in money value in six and second in seven more. (See table 2.) Its average rank for all of the tests was 3.5. No other cotton made a record that approached this. Lightning Express ranked first but twice and was not second in any test. Delfos-6102 out-yields Express and excels it in gin turnout by 3 or 4 per cent.



TABLE 2—RANK OF COTTON VARIETIES IN 23 TESTS IN MISSISSIPPI, 1922, ON BASIS OF MONEY VALUE

VARIETY	Number of Tests	Times of 1st Rank	Times of 2nd Rank	Times of 3rd Rank	Times of 4th Rank	Times of 5th Rank	Times of 6th Rank	Times of 7th Rank	Times of 8th Rank	Times of 9th Rank	Times of 10th Rank	Times of 11th Rank	Times of 12th Rank	Times of 13th Rank	Times of 14th Rank	Times of 15th Rank	Times of 16th Rank	Times of 17th Rank	Times of 18th Rank	Times of 19th Rank	Times of 20th Rank	Times of 21st Rank	Times of 22nd Rank	Times of 23rd Rank
Miss. Sta. Trice	11	1	1	1	2	1	...	...	...	...	...	...	1	1	4	...	...	...	...	...	...	...	...	1
Wann. Cleveland	5	...	...	...	...	...	...	...	...	...	...	1	...	1	1	...	...	...	...	...	1	...	...	...
Cleveland-37W	4	...	...	1	...	1	...	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
Acala	9	1	1	...	...	1	...	...	...	...	1	1	...	...	...	1	...	1	...	...	...	1	...	...
Long Star-65	9	1	1	...	...	1	1	1	2	1	1	...	...	...	...	...	1	...	...	...	...	...	...	...
Salsbury	16	1	...	2	...	...	2	2	1	3	...	...	...	2	1	...	...	...	...	...	1	...	...	...
Express-432	15	1	...	...	2	5	1	...	3	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...
Express-350	21	...	1	1	1	3	1	2	1	4	...	1	...	2	...	1	1	1	1	1	...	...	...	...
Express-Lightning	23	2	...	3	3	4	1	1	3	2	1	...	1	...	...	1	1	1	...	...	...	...	...	...
Express-Walcott	6	...	...	...	...	...	2	...	...	2	1	...	1	1	...	...	...	...	...	...	...	...	...	...
Foster-120	4	...	...	...	...	...	...	...	...	1	...	1	1	...	1	...	...	...	...	...	...	...	...	...
Delfos-6102	22	6	7	2	...	...	3	2	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
Delfos-631	20	3	3	3	1	1	...	4	...	1	1	...	1	...	...	...	2	...	...	...	...	...	...	...
Webber-49	12	...	1	...	1	...	...	...	...	1	1	2	...	...	1	1	...	...	...	1	1	1	1	1
Deltatype Webber	20	2	...	...	...	2	3	...	...	1	1	1	1	2	1	...	...	1	...	1	...	...	3	...
Sunpress	19	2	1	2	1	...	1	3	2	...	1	...	...	...	...	2	...	...	...	...	1	2	...	...

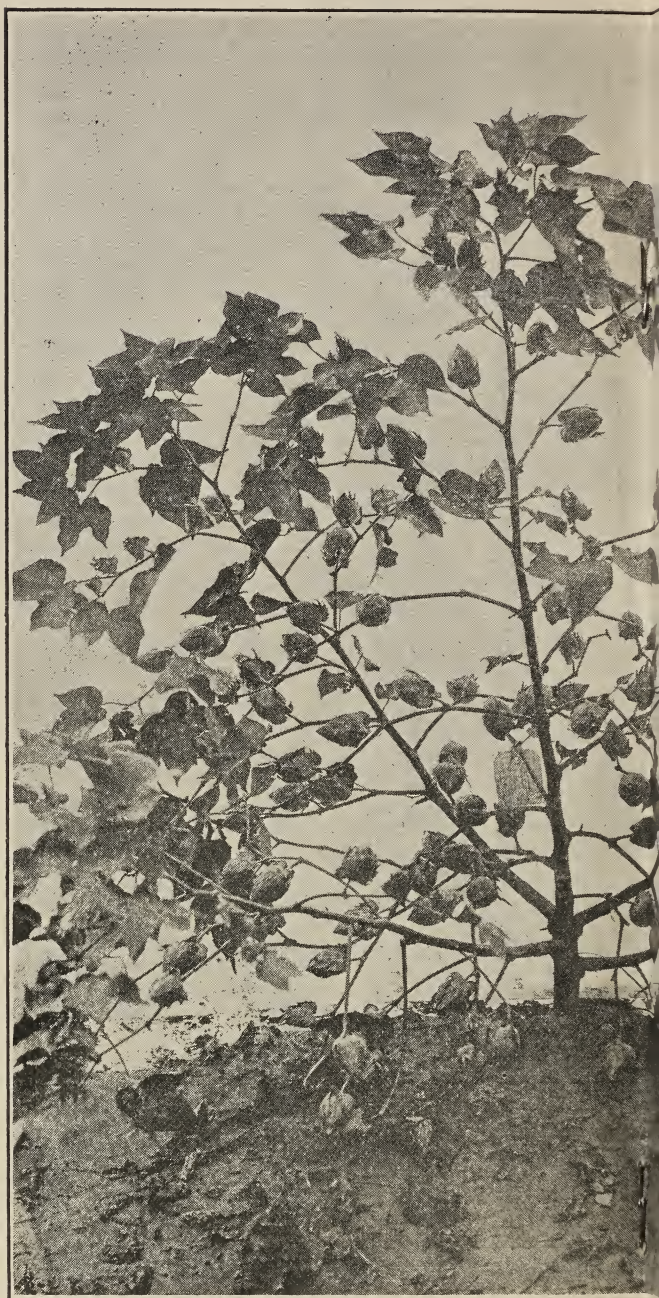


Fig. 1. A well fruited plant of Delfos-6102.



Grown by Stoneville Pedigreed Seed Company.

Notice, in the tables below, how Delfos-6102 compares with certain well known varieties in respect to yield of lint, money value, etc. Do you see that it makes more lint per acre than even the short staple varieties?

TABLE NO. 3—DELFO-6102 COMPARED WITH CLEVELAND WANNAMAKER

Variety	Station	Seed Cotton	Lint %	Lint Cotton	Staple Length	Money Value
Delfos-6102.....	Delta	1082.0	31.5	340.0	1-3/16	108.54
Cleveland Wan...	Delta	892.4	37.3	332.0	3/4	103.06
Delfos-6102.....	College	847.9	31.0	262.8	1-3/16	82.51
Cleveland Wan...	College	677.1	36.9	249.8	3/4	65.56
Delfos-6102.....	College (Hill)	456.0	33.0	150.5	1-1/8	43.35
Cleveland Wan...	College (Hill)	347.2	37.9	131.6	3/4	34.37
Delfos-6102.....	South Miss.	918.0	30.0	275.9	1-3/16f	93.31
Cleveland Wan...	South Miss.	657.0	34.5	226.9	7/8	64.66
Delfos-6102.....	Holly Springs	878.9	30.7	269.9	1-1/8	89.27
Cleveland Wan...	Holly Springs	598.9	34.5	207.0	7/8	57.97
Delfos-6102.....	H. S. (Hill).....	738.9	30.7	226.9	1-1/8	75.05
Cleveland Wan...	H. S. (Hill).....	544.4	34.5	188.2	7/8	42.71
Delfos-6102.....	Delta & Pine L'd Co.....	1413.0	29.5	417.1	1-1/8f	140.58
Cleveland Wan...	Delta & Pine L'd Co.....	1237.3	32.6	404.1	1	116.67
Delfos-6102.....	Seed Farm	1591.0	31.7	504.0	1-3/16	157.62
Cleveland Wan...	Seed Farm	1271.0	38.1	484.0	7/8	113.95

TABLE NO. 4—DELFO-6102 COMPARED WITH ACALA

Variety	Station	Seed Cotton	Lint %	Lint Length	Money Cotton	Staple Value
Delfos-6102.....	Delta Station	1082.0	31.5	340.8	1-3/16	108.54
Acala.....	Delta Station	767.2	35.6	273.1	1-1/16	78.16
Delfos-6102.....	Delta Station	1109.0	32.3	357.0	1-3/16	113.21
Acala.....	Delta Station	884.8	35.3	312.5	1-1/16	89.52
Delfos-6102.....	College Station	849.9	31.0	262.8	1-3/16	82.51
Acala.....	College Station	901.6	36.3	327.3	1-1/16f	92.69
Delfos-6102.....	South Miss. Sta.	918.0	30.0	275.9	1-3/16f	93.31
Acala.....	South Miss. Sta.	765.0	35.3	270.7	1-1/16f	80.73
Delfos-6102.....	Holly Springs	878.9	30.7	269.9	1-1/8	86.45
Acala.....	Holly Springs	850.0	34.9	293.7	1-1/16	75.05
Delfos-6102.....	Holly Springs (Hill).....	738.9	30.7	226.9	1-1/8	93.71
Acala.....	Holly Springs (Hill).....	668.9	34.9	233.9	1-1/16	68.77
Delfos-6102.....	Delta & Pine L'd Co.....	1413.0	29.5	417.1	1-1/8f	140.58
Acala.....	Delta & Pine L'd Co.....	1270.2	31.3	398.8	1-1/16f	124.60
Delfos-6102.....	Seed Farm	1720.0	32.7	562.0	1-1/8f	169.19
Acala.....	Seed Farm	1389.0	35.9	499.0	1-1/16	127.85
Delfos-6102.....	Heathman	1142.0	35.3	403.0	1-1/8	113.66
Acala.....	Heathman	1030.0	39.1	403.0	1	93.56

TABLE NO. 5—DELFO-6102 COMPARED WITH SALSBU-RY

Variety	Station	Seed Cotton	Lint %	Lint Cotton	Staple Length	Money Value
Delfos-6102.....	Delta Station	1082.0	31.5	340.8	1-3/16	\$108.54
Salsbury.....	Delta Station	743.2	32.8	243.7	1-1/8	74.56
Delfos-6102.....	Bolivar Co.	1462.0	.....	435.1	.....	142.00
Salsbury.....	Bolivar Co.	1263.0	.....	411.0	.....	128.60
Delfos-6102.....	College Sta.	847.9	31.0	262.8	1-3/16	82.51
Salsbury.....	College Sta.	804.0	32.0	257.3	1-1/8	77.75
Delfos-6102.....	South Miss. Sta.....	918.0	30.0	275.9	1-3/16f	93.31
Salsbury.....	South Miss. Sta.....	873.0	31.9	279.1	1-1/8	88.83
Delfos-6102.....	Holly Springs	878.9	30.7	269.9	1-1/8	89.27
Salsbury.....	Holly Springs	738.9	30.1	222.6	1-1/8	70.61
Delfos-6102.....	Holly Springs (Hill).....	728.9	30.7	226.9	1-1/8	75.05
Salsbury.....	Holly Springs (Hill).....	591.1	30.1	178.1	1-1/8	56.49
Delfos-6102.....	Delta & Pine L'd Co.....	1413.0	29.5	417.1	1-1/8f	140.58
Salsbury.....	Delta & Pine L'd Co.....	1344.4	30.8	414.1	1-1/8	133.53
Delfos-6102.....	Seed Farm	1720.0	32.7	562.0	1-1/8f	169.19
Salsbury.....	Seed Farm	1452.0	32.5	472.0	1-1/16	125.71

TABLE NO. 6—DELFO-6102 COMPARED WITH LIGHTNING EXPRESS

Variety	Station	Seed Cotton	Lint %	Lint Cotton	Staple Length	Money Value
Delfos 6102	Delta Station	1082.0	31.5	340.8	1-3/16	\$108.54
Lightning Exp.	Delta Station	986.7	28.8	284.0	1-3/16	92.17
Delfos 6102	College Station	847.9	31.0	262.8	1-3/16	82.51
Lightning Exp.	College Station	911.3	29.7	270.7	1-3/16	85.05
Delfos 6102	College Sta. (Hill)	456.0	33.0	150.5	1-1/16f	43.35
Lightning Exp.	College Sta. (Hill)	280.8	30.0	114.2	1-1/8	34.93
Delfos 6102	South Miss. Sta.	918.0	30.0	275.9	1-3/16	93.31
Lightning Exp.	South Miss. Sta.	900.0	27.8	250.8	1-3/16	85.19
Delfos 6102	Holly Springs	878.9	30.7	269.9	1-1/8	89.20
Lightning Exp.	Holly Springs	894.4	28.0	250.9	1-1/8	83.48
Delfos 6102	Holly Springs (Hill)	738.9	30.7	226.9	1-1/8	75.05
Lightning Exp.	Holly Springs (Hill)	746.6	28.0	209.4	1-1/8	69.68
Delfos 6102	Delta Pine L'd Co.	1413.0	29.5	417.1	1-1/8f	140.58
Lightning Exp.	Delta Pine L'd Co.	1387.3	27.3	379.9	1-3/16	134.59
Delfos 6102	Seed Farm	1720.0	32.7	562.0	1-1/8f	169.19
Lightning Exp.	Seed Farm	1327.0	27.5	386.0	1-3/16	122.62
Delfos 6102	Bolivar County	1343.1	.....	423.4	.....	138.61
Lightning Exp.	Bolivar County	1265.8	.....	362.0	.....	117.33

TABLE NO. 7—DELFO-6102 COMPARED WITH DELTA TYPE WEBBER

Variety	Station	Seed Cotton	Lint %	Lint Cotton	Staple Length	Money Value
Delfos-6102	Delta Station	1082.0	31.5	340.8	1-3/16	\$108.54
Deltatype Webber	Delta Station	678.9	30.5	207.0	1-1/4	68.42
Delfos-6102	Bolivar Co. (S)	1478.0	.....	456.4	1-3/16	180.21
Deltatype Webber	Bolivar Co.	1226.0	.....	329.0	1-1/4	103.04
Delfos-6102	College Station	847.9	31.0	262.8	1-3/16	82.51
Deltatype Webber	College Station	500.2	28.5	142.6	1-1/4	46.90
Delfos-6102	South Miss. Sta.	918.0	30.0	275.9	1-3/16f	93.31
Deltatype Webber	South Miss. Sta.	675.0	30.4	205.4	1-1/4	70.30
Delfos-6102	Holly Springs	878.9	30.7	269.9	1-1/8	69.27
Deltatype Webber	Holly Springs	404.4	27.7	112.9	1-1/4	38.50
Delfos-6102	Holly Spgs. (Hill)	738.9	30.7	226.9	1-1/8	75.05
Deltatype Webber	Holly Spgs. (Hill)	482.2	27.7	132.6	1-1/4	45.66
Delfos-6102	Delta Pine L'd Co.	1413.0	29.5	417.1	1-1/8f	140.58
Deltatype Webber	Delta Pine L'd Co.	1084.6	26.4	286.1	1-1/4f	110.48
Delfos-6102	Seed Farm	1720.0	32.7	562.0	1-1/8f	169.19
Deltatype Webber	Seed Farm	1257.0	30.3	381.0	1-3/16	120.11
Delfos-6102	Heathman	1142.0	35.3	403.0	1-1/8	113.66
Deltatype Webber	Heathman	888.0	30.5	271.0	1-3/16	85.32
Delfos-6102	Dunleith	1553.0	33.9	526.0	1-1/8f	157.36
Deltatype Webber	Dunleith	1137.0	30.8	350.0	1-3/16f	115.27

You may also want to know how Delfos-6102 compares with other varieties when grown on a plantation scale. Table 8 gives figures on actual yield on plantations in 1922.

TABLE NO. 8—FIELD PERFORMANCE OF DELFO-6102 AND 631 IN 1922
TRAIL LAKE PLANTATION

Variety	No. Acres	No. Bales	Lint Per Acre	Lint %	Staple* Length
Delfos-6102	290	162	388	.....	6.8
Delta Type Webber	500	164	198	.....	8.4
Express-350	1550	585	227	.....	6.9
Lightning Express	38	24	282	.....	7.3

DUNLEITH PLANTATION

Variety	No. Acres	No. Bales	Lint Per Acre	Lint %	Staple* Length
Foster-120	1387	669	243	.....	6.4
Delfos-6102	168	121	377	32.0	7.2
Express-350	250	143	366	27.0	7.6
Delfos-631	145	111	411	31.0	7.7

*These figures are the average of the whole number of bales from the inbound classification of the Staple Cotton Association classers at Greenwood, Miss. The out-bound classification was about 1/32 of an inch longer.

Key to numbers: 6—1-1/8 inches; 7—1-1/8 inch full; 8—1-3/16 inches.

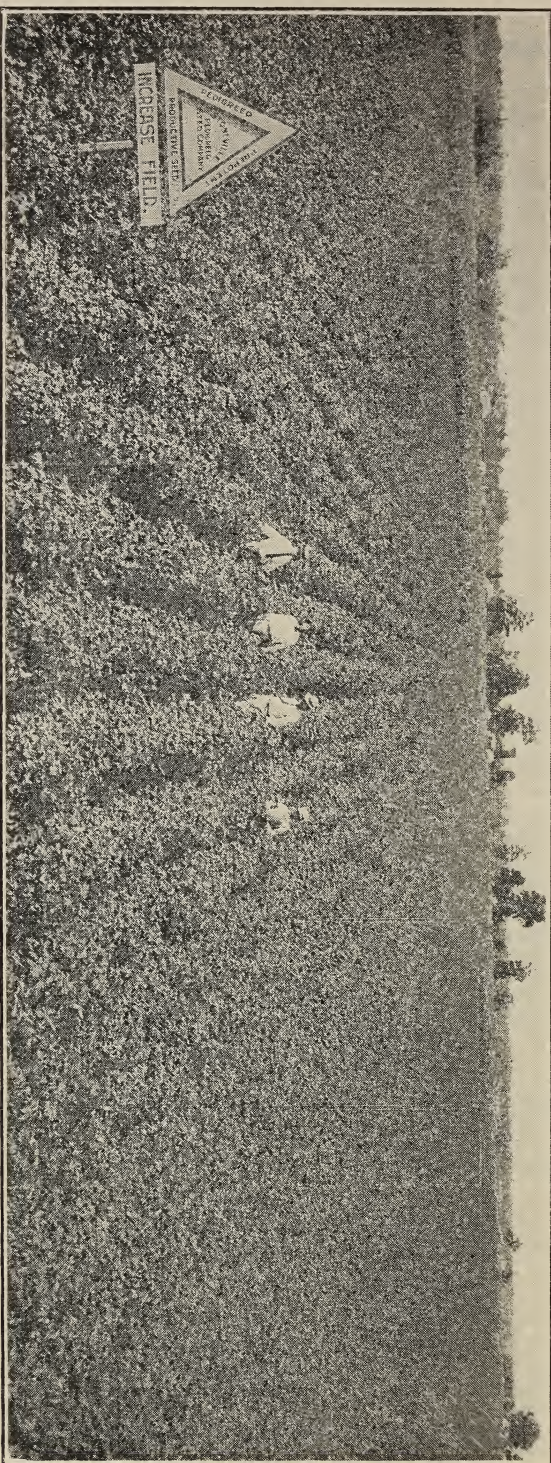


Fig. 3. An increase field of Delfos-6102 at Heathman, Miss. Note the uniformity of the plants.

DESCRIPTION

Delfos-631 has erect plants of medium height, and is rather open. Where the plants are not crowded there are one or more vegetative branches; leaves are small to medium size; bolls are rather long, ovate, long pointed, running 64 to 70 to a pound; bolls open well, are fairly stormproof and pick well; staple $1\frac{5}{16}$ to $1\frac{1}{4}$ inches in length; lint percentage 30 to 31.5.

Delfos-631 resembles Delfos-6102 in general appearance but is some taller and a little more vigorous in its growth. See Fig. 4 on pages 8 and 9. It is consequently somewhat better for planting on poor land but does well on rich soil. It is very early and prolific for a cotton with a large boll. The staple length is better than that of Delfos 6102 and Express, and it also excels most strains of Express in lint percentage by about three per cent.

The productiveness of Delfos-631 is well shown by the following table:

PERFORMANCE RECORD OF DELFOS-631

Variety	Test	Seed Cotton Per Acre	Staple Length	Lint %	Money Value Per Acre	Rank in Money Value	Rank in Bolls to a Pound
Miss. Col. Exp. Sta., '19		1033	1-3/16	30.4	215.50	1	64
Delta Exp. Sta., '19		1280	1-3/16	30.0	263.96	9	.....
Miss. Col. Exp. Sta., '20		995	1-5/16	30.5	107.12	1	66
Delta Exp. Sta., '20		1897	1-3/16	32.0	158.87	1	.....
Miss. Col. Sta., '21		1398	1-3/16f	31.7	136.03	7	.....
Delta Exp. Sta., '21		1527	1-1/4	30.9	186.32	2	66
Raymond Exp. Sta., '21		1019	1-1/4	33.5	102.17	2	.....
College Exp. Sta., '22		756	1-1/4	30.5	74.95	16	.....
Delta Exp. Sta., '22		1020	1-1/4	31.4	103.71	5	.....
South Miss. Exp. Sta., '22		1008	1-1/4	30.6	105.46	4	.....
Raymond Exp. Sta., '22		1185	1-1/4	31.5	116.67	12	.....
Seed Farm, Stoneville, '22		1719	1-3/16	31.5	169.39	1	66

The Stoneville Pedigreed Seed Company does real constructive plant breeding work. See picture of breeding plots and trial grounds. It has employed the highest salaried plant breeder in the State, who devotes the major part of his time to cotton breeding. **He originated Delfos, the most popular staple cotton of the present time.**

Go to the **ORIGINATOR** if you wish to purchase the best Delfos seed.



Fig. 4. A typical plant of Delfos-631.

Stoneville Pedigreed
Seed Company
Stoneville, Mississippi

SMITH-STRAWN, INC., MEMPHIS